

Abstract

An antireflection film that has sufficient antireflection capability and antifouling property and is improved in scratch resistance, and a process for producing an antireflection film with considerably high productivity are provided, which is an antireflection film comprising a transparent support, a hard coat layer and a low refractive index layer, in this order, wherein the hard coat layer includes a polymerized product of (A) an ethylene oxide or propylene oxide adduct of a polyfunctional acrylate monomer and (B) a polyfunctional acrylate monomer having no oxide adduct.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
5 August 2004 (05.08.2004)

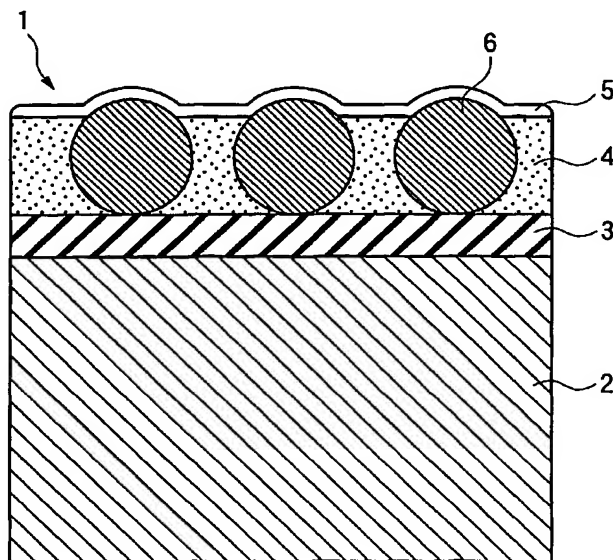
PCT

(10) International Publication Number
WO 2004/066001 A1

- (51) International Patent Classification⁷: **G02B 1/10**, 5/30, B32B 27/30
- (21) International Application Number: **PCT/JP2004/000559**
- (22) International Filing Date: 22 January 2004 (22.01.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 2003-013922 22 January 2003 (22.01.2003) JP
- (71) Applicant (for all designated States except US): **FUJI PHOTO FILM CO., LTD.** [JP/JP]; 210, Nakanuma, Minami-Ashigara-shi, Kanagawa 250-0123 (JP).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **MURAMATSU, Yuuzou** [JP/JP]; c/o Fuji Photo Film Co., Ltd., 210, Nakanuma, Minami-Ashigara-shi, Kanagawa 250-0123 (JP).
- (74) Agents: **OGURI, Shohei** et al.; Eikoh Patent Office, Ark Mori Building, 13th Floor, 12-32, Akasaka 1-chome, Minato-ku, Tokyo 107-6013 (JP).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: ANTIREFLECTION FILM, POLARIZING PLATE AND DISPLAY DEVICE



(57) Abstract: An antireflection film that has sufficient antireflection capability and antifouling property and is improved in scratch resistance, and a process for producing an antireflection film with considerably high productivity are provided, which is an antireflection film comprising a transparent support, a hard coat layer and a low refractive index layer, in this order, wherein the hard coat layer includes a polymerized product of (A) an ethylene oxide or propylene oxide adduct of a polyfunctional acrylate monomer and (B) a polyfunctional acrylate monomer having no oxide adduct.



Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.